

## REMARKS

The Office Action of October 1, 2002 has been received and reviewed. This response is directed to that action. Applicants petition the USPTO for a three-month extension of time to reply to this action, thereby making this reply due on March 1, 2003. The office is hereby authorized to charge Applicant's deposit account accordingly.

### *Claim Rejections-35 U.S.C. §112, first paragraph*

The Examiner rejected claims 1-7 under 35 U.S.C. §112, first paragraph as containing newly added subject matter for the temperature range of 244-700°F. Claim 1 has been amended to remove the lower 244 °F limit, and is replaced with a lower limit of 250°F, which is fully supported by the specification on page 3, lines 15-16 and on page 5, line 25. Furthermore, the Examiner stated that the term "comprising" at the end of the phrase "Fischer-Tropsch derived distillate" in claim 1 is contradictory to the specification. Claim 1 has been amended to remove the comprising term so as to be consistent with the description in the specification. Therefore, these rejections are obviated.

Claims 1-7 were additionally rejected under 35 U.S.C. §112, first paragraph as based on a disclosure that is non-enabling. The Examiner stated that the physical properties of the F-T distillate and the virgin distillate, the relative proportions of the F-T distillate to the virgin distillate and alone without some other component are critical to the practice of the invention, but not included in the claims. Applicants respectfully disagree. The essential physical properties are, in fact, included in claim 1 in the 250-700°F boiling range limitation for both the F-T and virgin distillate. Because the boiling

range is known, a person of ordinary skill in the art would certainly be able to determine the physical composition of each distillate stream. Furthermore, the relative proportions of each distillate are dependent on the sulfur content. As long as the resulting blend contains greater than 2 ppm sulfur, the relative concentrations can be determined. Moreover, dependent claims 2-4 further define the physical properties and relative amounts of the distillates. Therefore, based on the foregoing reasons, the claims are enabled and Applicants respectfully request that the rejection be withdrawn.

*Claim Rejections-Obviousness-Type Double Patenting*

The Examiner rejected claims 1-7 of the present invention under the doctrine of obviousness-type double patenting because the claims of the present invention and the claims of the USPN 6,274,029 are not patentably distinct. The '029 patent teaches that a Fischer-Tropsch distillate comprising certain properties may be blended with a petroleum-derived hydrocarbon fraction, whereas the present invention teaches a distillate blend comprised of a Fischer-Tropsch distillate and a virgin distillate, having unexpectedly improved oxidative stability. By blending an F-T distillate with a virgin distillate so that the resulting blend contains  $\geq 2$  ppm sulfur so as to achieve improved stability, Applicants, by teaching *how to blend* have discovered an unexpected property of the resulting blend. Applicants invite the Examiner to revisit the 37 C.F.R. §132 affidavit filed by inventor Berlowitz on 6/17/02, which states that an experiment mixing an F-T stream with a light catalytically cracked oil (which is taught in claim 11 of the '029 patent) demonstrates that the blend has relatively poor stability despite having greater than 2 ppm sulfur. Therefore, because the present invention teaches a unique

blend that demonstrates unexpected properties of the broad genus of claim 11 of the '029 patent, the Applicants respectfully request that the rejection be withdrawn.

The Examiner also rejected claims 1-7 under obviousness-type double patenting over USPN 6,309,432 because the claims of the present invention and the claims of the patent are not patentably distinct. Applicants respectfully submit that the '432 patent merely teaches that an F-T distillate can be blended with other distillates. Conversely, the present invention teaches how to blend an F-T distillate with a virgin distillate to achieve a specific product with specific characteristics. There is no teaching in the '432 patent to blend the distillates to obtain a resulting blend with improved stability as shown in the present invention. Therefore, based on the foregoing reasons, the rejections should be withdrawn.

Claims 1-7 were further provisionally rejected under obviousness-type double patenting over USSN 09/971,254 because the F-T fraction and virgin distillate blend of the present invention are encompassed by the F-T fraction and petroleum-derived hydrocarbon blend of the '254 application. Again, the Applicants note that the present invention blends an F-T distillate with a virgin distillate, which is a species of the petroleum-derived hydrocarbon distillate genus of the application, to achieve unexpected results. As demonstrated in the Berlowitz affidavit, those results are not present when blended with other products of the genus. Furthermore, there is nothing in the '254 application that teaches how to blend the distillates as the present invention clearly does. Therefore, because the present invention finds unexpected properties not demonstrated in the application and because the application neither teaches nor suggests *how to blend* the distillates to achieve the desired result, the rejection should be withdrawn.

Terminal disclaimers are provided herewith to overcome the double patenting rejections for USPN 6,180,842 and 6,162,432.

Claim Rejections-35 U.S.C. §103(a)

The Examiner rejected claims 1-7 as obvious in view of USPN 5,689,031 to Berlowitz et al. In her rejection, the Examiner stated that the blended fuel of Berlowitz renders the present claims obvious because the F-T distillate of Berlowitz can be blended with a low-quality petroleum-derived hydrocarbon stream. Applicants respectfully disagree. Berlowitz only shows that the F-T distillate can be blended with a low-quality petroleum stream. Conversely, the present invention teaches how to blend an F-T distillate with a virgin distillate to achieve a resulting blend that has a specific characteristic, the unexpectedly improved stability. Berlowitz never suggests that blending the distillates of the present invention will produce a fuel with improved oxidative stability. Rather, Berlowitz teaches that the blend fuel needs only 10% or greater F-T distillate to upgrade a low-quality stream, whereas the present invention requires at least 50% F-T distillate to achieve the blend with improved stability. That Berlowitz only requires 10% F-T distillate clearly indicates that he never contemplated blending F-T distillates with virgin distillates to achieve a very specific product with specific characteristics. Therefore, based on the foregoing reasons, the present invention is not obvious in view of Berlowitz et al and Applicants respectfully request that the rejection be withdrawn.

Applicants believe that the claims now present in this application to be patentable and that this application is in condition for allowance, and such favorable action is respectfully requested. If any questions or issues remain, the resolution of which the Examiner feels would be advanced by a conference, she is invited to contact Applicants' attorney at the telephone number noted below.

Respectfully submitted,

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☒ Pursuant to 37 CFR 1.34(a)

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AMENDED CLAIM 1 WITH MARKINGS

1. (Twice Amended) A blend material useful as a distillate fuel or as a blending component for a distillate fuel comprising: (a) a Fischer-Tropsch derived distillate [comprising] wherein the distillate is a [244] 250-700°F fraction, and (b) a virgin distillate [comprising] wherein the distillate a [244] 250-700°F fraction, wherein the sulfur content of the blend is  $\geq 2$  ppm by wt.

AMENDED CLAIM 1 IN CLEAN FORM

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1. (Twice Amended) A blend material useful as a distillate fuel or as a blending component for a distillate fuel comprising: (a) a Fischer-Tropsch derived distillate wherein the distillate is a 250-700°F fraction, and (b) a virgin distillate wherein the distillate is a 250-700°F fraction, wherein the sulfur content of the blend is  $\geq 2$  ppm by wt.